FOOT STRAP FOR TREE STAND

I. Background of the Invention

A. Field of the Invention

This application claims priority to provisional patent application, Serial No. 60/258,118, entitled **Foot Strap For Tree Stand**, filed December 22, 2000. This invention relates to the art of tree stands, and more particularly to the art of foot straps for tree stands.

B. Description of the Related Art

Is known in the art to provide foot straps for tree stands. The foot straps allow the individual to secure their feet while sitting or climbing with the tree stand. Currently, the foot straps are permanently attached to the tree stands and generally do not have additional support for the user's heel. The current foot straps that do have something for the heel generally use an elastic band. However, no current foot strap for a tree stand allows for adjustment of both the heel and foot portions along with the ability to selectively remove the entire foot strap.

The present invention provides a new and improved foot strap for tree stands, and overcomes certain difficulties inherent in the related inventions while providing better overall results.

II. Summary of the Invention

In accordance with one aspect of the present invention, the foot strap is selectively removable from the tree stand.

In accordance with another aspect of the present invention, the foot and heel straps are adjustable.

In accordance with another aspect of the present invention, the foot strap can be used in conjunction with existing tree stands.

In accordance with still another aspect of the present invention, a foot strap for use with an associated tree stand includes an arch portion, a heel portion, at least two connecting points, the arch portion and the heel portion connected at the at least two connecting points, a first connecting clip, the arch portion clip connecting the arch portion together, a second connecting clip, the heel portion clip connecting the heel portion together, a first adjusting strap, and a second adjusting strap.

In accordance with another aspect of the present invention, a foot strap includes a first strap, a second strap, the second strap connected substantially perpendicular to the first strap, the second strap connected to the first strap at at least two connecting points, first adjusting means for adjusting the first strap, and second adjusting means for adjusting the second strap.

In accordance with another aspect of the present invention, the adjusting means further include connecting clips, the straps being threaded through the clips so that the straps can be adjusted.

In accordance with another aspect of the present invention, the first strap is substantially oval-shaped, and the second strap is substantially U-shaped.

In accordance with another aspect of the present invention, the first strap is an arch portion and the second strap is a heel portion.

In accordance with another aspect of the present invention, the foot strap is selectively adjustable.

In accordance with another aspect of the present invention, the foot strap is selectively removable from an associated tree stand.

In accordance with another aspect of the present invention, the clips have male and female ends.

In accordance with another aspect of the present invention, the circumference of the first strap is greater than the circumference of the second strap.

In accordance with another aspect of the present invention, a method for ensuring safety on an associated tree stand includes the steps of providing a foot strap, the foot strap having a first strap, a second strap, first adjusting means, and second adjusting means, connecting the second strap to the first strap at at least two connecting points, connecting the first strap to the associated tree stand, adjusting the first adjusting means to fit an associated foot, connecting the second strap around an associated heel, and adjusting the second adjusting means to fit the associated heel.

In accordance with another aspect of the present invention, the method further includes selectively removing the foot strap from the associated tree stand.

In accordance with another aspect of the present invention, connecting the first strap to the associated tree stand further includes threading the first strap through a first connecting clip and connecting the first strap to the associated tree stand using the first connecting clip.

In accordance with another aspect of the present invention, providing a foot strap, the foot strap having a first strap, a second strap, first adjusting means, and second adjusting means further includes providing a foot strap, the foot strap having a first strap, a second strap, first adjusting means, and second adjusting means, the first strap having a circumference greater than the circumference of the second strap.

Still other benefits and advantages of the invention will become apparent to those skilled in the art upon a reading and understanding of the following detailed specification.

III. Brief Description of Drawings

The invention is illustrated is illustrated in the following drawings:

FIGURE 1 is a front view of the foot strap;

FIGURE 2 is a top view of the foot strap;

FIGURE 3 is a perspective view of a connecting clip; and,

FIGURE 4 is a perspective view of a tree stand.

IV. <u>Description of the Invention</u>

With reference to FIGURES 1-3, a foot strap 20 has a arch portion 14, a heel portion 16, first and second connecting points 24, 26, first and second connecting clips 10, 12, and first and second adjusting straps 18, 22. In this embodiment, the arch portion 14 is connected in a substantially circular arrangement when the first connecting clip 10 is connected. The second adjusting strap 22 passes through the first connecting clip 10 and

extends outwardly as shown in FIGURE 1. The first connecting clip 10 allows the user to selectively adjust the arch portion 14, so that the user can ensure that his foot is held in place securely. In this embodiment, the strap 20 is made of nylon, but it is to be understood that the strap 20 could be made of any flexible material chosen using sound engineering judgment.

With continuing reference to FIGURE 1, the heel portion 16 is connected to the arch portion 14 at the first and second connecting points 24, 26. In this embodiment, the heel portion 16 is sewn to the arch portion 14 at connecting points 24, 26. The arch portion 14, unlike the existing straps, is designed to go over the arch of the user's foot instead of the toes. This gives the user a more secure fit and a greater degree of control. However, it is to be understood that the portions 14, 16 can be connected in any manner, as long as chosen using sound engineering judgment. In this embodiment, the heel portion 16 extends outwardly (into the page as shown in FIGURE 1) from the arch portion 14 at substantially 90°. The heel portion 16 has a second connecting clip 12 that functions in the same manner as the first connecting clip 10. The heel portion 16 also has a first adjusting strap 18 that functions identically to second adjusting strap 22. The ability to adjust the heel portion 16 allows the heel of the user to be more firmly secured on the tree stand 32. An adjustable strap 18 can be adjusted to any foot length or width, whereas an elastic band is limited in this manner.

With reference now to FIGURE 3, the connecting clip 10, 12 has a male portion 28 and a female portion 30 that connect in a known manner. The connecting clips 10, 12 shown in this embodiment are not intended to limit the invention in any manner. It is to be understood that any means of connecting and adjusting the strap 20 can be used, as long as chosen using sound engineering judgment.

With reference now to FIGURE 4, the tree stand 32 is shown, with platform 34. In order to attach the strap 20 to the platform 34, the connecting clip 10 would be

detached and the two ends of the bottom portion of the arch portion 14 would be threaded through the openings (shown, but not referenced) in the platform 34. The clip 10 would then be attached, thereby securing the strap 20 to the platform 34. A second strap 20 can be added to the platform 34 in a similar fashion. Once the strap 20 is attached to the platform 34, the user inserts his foot into the arch portion 14, adjusts arch portion 14 by pulling on second adjusting strap 22 until arch portion 14 is snug about the foot. The user then slips heel portion 16 over his heel and pulls on first adjusting strap 18 until the heel portion 16 is snug about the user's heel. A second strap 20 can be adjusted in similar fashion.

In this embodiment, the strap 20 may be used in conjunction with any tree stand 32 and is removable from the tree stand 32. The method by which the strap 20 is selectively attached to a tree stand 32 can be any method known in the art and chosen using sound engineering judgment. It is also to be understood that the strap 20 could be permanently fixed to the tree stand 32.

The back of the heel portion 16 being tight against the user's heel allows the user to better control the movement of the tree stand 32 when the user is climbing the tree. The user can apply pressure to the heel portion 16 and thereby exert more force and control on the tree stand 32.

Either of the portions 14, 16 may be used to attach hunting, or other, implements (not shown). The implements can be attached in any manner to the portions 14, 16 or strap 20, as long as done using sound engineering judgment.

The invention has been described with reference to at least one embodiment. Obviously, modifications and alterations will occur to others upon a reading and understanding of the specification. It is intended by applicant to include all such modifications and alterations insofar as they come within the scope of the appended

claims or the equivalents thereof.

Having thus described the invention, it is now claimed: